



WORKSHOP OVERVIEW

An estuary is a body of water where salt water from the ocean mixes with fresh water from the river. The Delaware Estuary stretches approximately 134 miles, from the falls of the Delaware River at Trenton, NJ and Morrisville, PA, south to the mouth of the Delaware Bay between Cape May, NJ and Cape Henlopen, DE. This highly commercialized watershed is also a vital ecosystem. The Delaware Estuary Watershed is home to over 130 species of finfish, the second largest population of migrating shorebirds in the western hemisphere, and the largest population of spawning horseshoe crabs in the world.

The Partnership for the Delaware Estuary and The Academy of Natural Sciences will be coordinating a week-long workshop for teachers. Through a mixture of laboratory and field experiences, teachers will be provided with the opportunity to explore the differences between urban and rural watersheds, and compare the upper portions of the Delaware Estuary with the mouth of the Bay. Working with Academy scientists, teachers will gain hands-on experience performing water chemistry tests, identifying macroinvertebrates, sampling fish populations, studying wetland functions, and taking part in various other environmental activities. These experiences will provide the participants with a greater understanding of the wide variety of environmental issues within the Estuary and the interconnections between human actions and the River's ecosystems.

Academy scientist Danielle Kreeger, demonstrating scientific tools to quantify species diversity at John Heinz Wildlife Refuge at Tinicum.



REQUIREMENTS

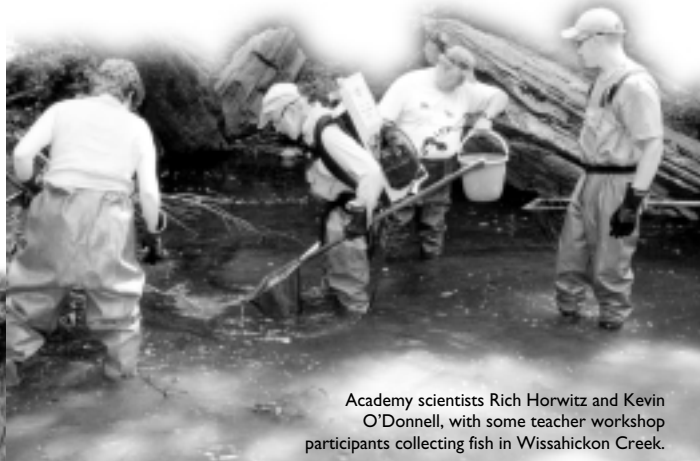
- Must be a K-12 public or private school classroom teacher or environmental educator from a school or organization that is within the Delaware Estuary Watershed.

- Submit a completed registration form, and a one-page statement that includes:

Three examples of how you have integrated environmental education into your current classes; and

How you will commit to using the knowledge and skills acquired in the Institute to engage your students and other teachers in your school and district in Estuary education.

- Submit a letter from your principal regarding your professional and personal characteristics which makes you a superior candidate for acceptance into the Institute and a statement of support for your efforts to integrate Estuary education in your classroom and school.
- Attend an introductory meeting and canoe trip, June 25th on the Schuylkill River, all five days of the Institute, and a reunion meeting on October 23rd.



Academy scientists Rich Horwitz and Kevin O'Donnell, with some teacher workshop participants collecting fish in Wissahickon Creek.

"I was accepted into the Institute and found it was not what I had bargained for, it was much more! The week was so organized, the trips so well scheduled, and the speakers and destination so well selected that I can honestly say it was the best week I have ever spent in training as a teacher."

Robert Cunningham, Edison/Fareira High School, Philadelphia



Explore the watershed first hand, by canoe.

BENEFITS OF PARTICIPATING IN THE 2004 WORKSHOP

- Professional instruction in content and themes of watershed education.
- **Over \$200 worth of timely and teacher-tested educational materials and equipment from private and public agencies and educational institutions.**
- Exciting field trips in Delaware, New Jersey, and Pennsylvania.
- Complimentary accommodations and meals.
- Clock hours, continuing professional education hours, or professional development hours (depending upon the state) upon successful completion of the Institute's requirements.
- After successful completion of the workshop teachers will be eligible for the "Sense of Place" program, which provides teachers with the technical assistance and supplies to create wildlife areas on their school's properties.

SPONSORED BY:

Partnership for the Delaware Estuary, Inc.
The Academy of Natural Sciences

WITH ASSISTANCE FROM:

DE Department of Natural Resources
& Environmental Control
Delaware Estuary Program
National Oceanic and Atmospheric Administration
PA Department of Environmental Protection,
Coastal Zone Management Program
Pennsylvania American Water
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